

From Intuition to Intelligence: Engineering Teams for Strategic Success

A Strategic Proposal by Alexander Lambrianou to Enhance Team Design

Net Zero Aviation Strategy

AMBITIOUS SUSTINABABILTY GOALS

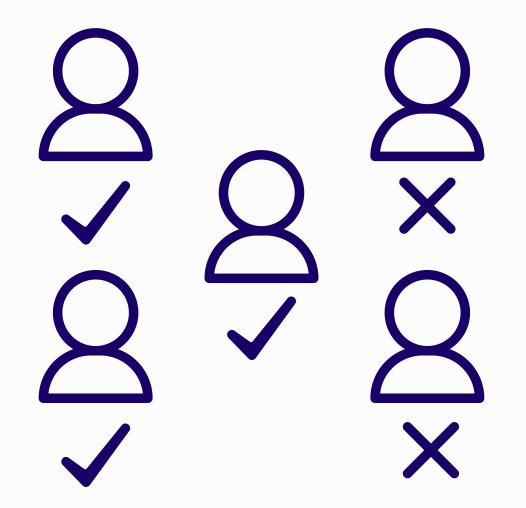




-45%

Team Formation

'REAL-WORLD POLICY PROBLEMS ARE INHERENTLY INTERDISCIPLINARY AND CANNOT BE ADDRESSED WITH KNOWLEDGE FROM ONLY A SINGLE...
DISCIPLINE' (NEWMAN, 2023)



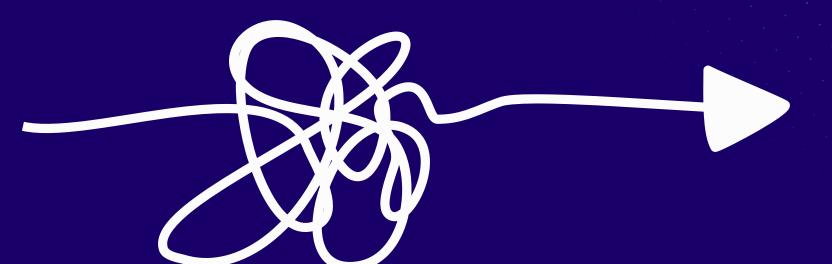
- TRADITION
- INTUITION
- JOB LABELS
- EXISTING SOCIAL TIES

A Strategic Blind Spot

TRADITIONAL COLLABORATION MODELS AND METHODS OVERLOOK THE MOST CRITIACL FACTOR: THE CONTENT OF THE KNOWLEDGE BEING SHARED

TEAM INEFFICIENCY / INEFFECTVENES

COMPLEX PROBLEM



STRATEGIC MISALIGNMENT

SLOWED INNOVATION

COST

The Solution: A Framework for Strategic Team Design

DATA-DRIVEN

COMPUTATIONALLY VALIDATED

FLEXIBLE

Stage 1 - Identify the Best Possible Teams



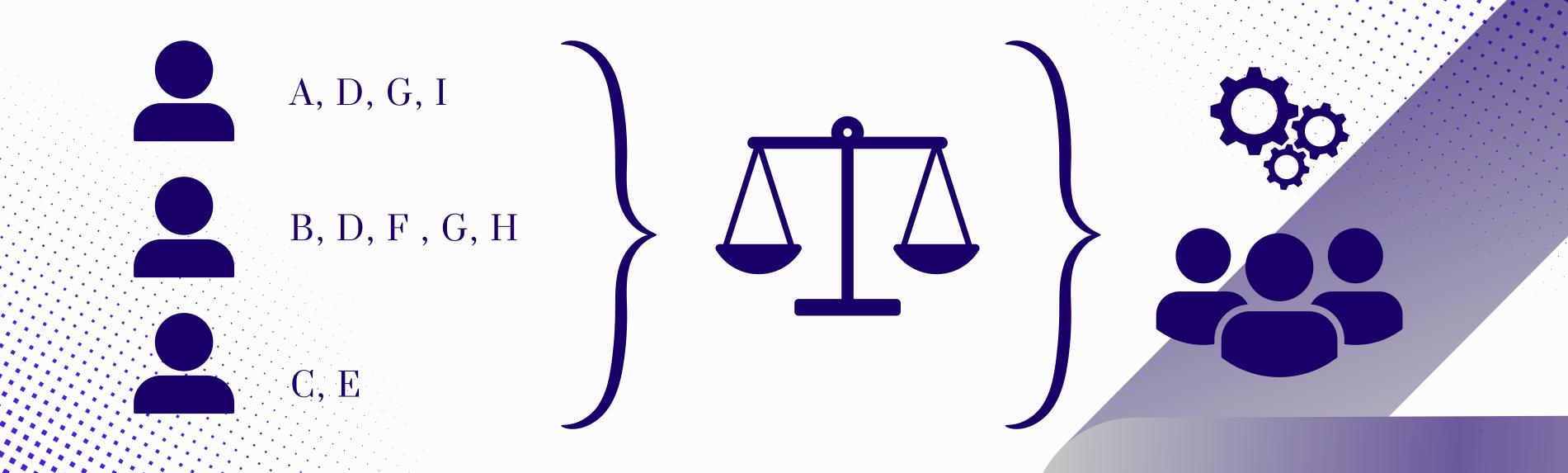
PERSONNEL

AVAILABILITY

ADAPTABLE TO: &

TEAM SIZE

Stage 2 - Analyse Internal Team Structure



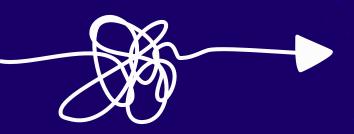
Stage 3 - Deliver Strategic Insight







COMPLEX PROBLEM



STRATEGIC MISALIGNMENT

SLOWED INNOVATION COST

COMPLEX PROBLEM



SOLUTION

The How:

- 1. DEFINE PROBLEM
- & EXPERTS

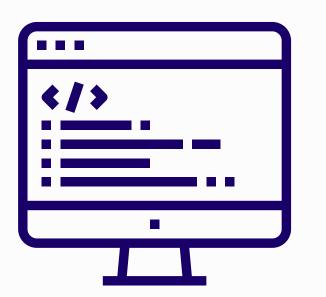
2. BUILD CUSTOM BENCHMARK

- 3. RUN ANALYSIS
- & OPTIMISATION

4. DELIVER
STRATEGIC
RECOMMENDATIONS

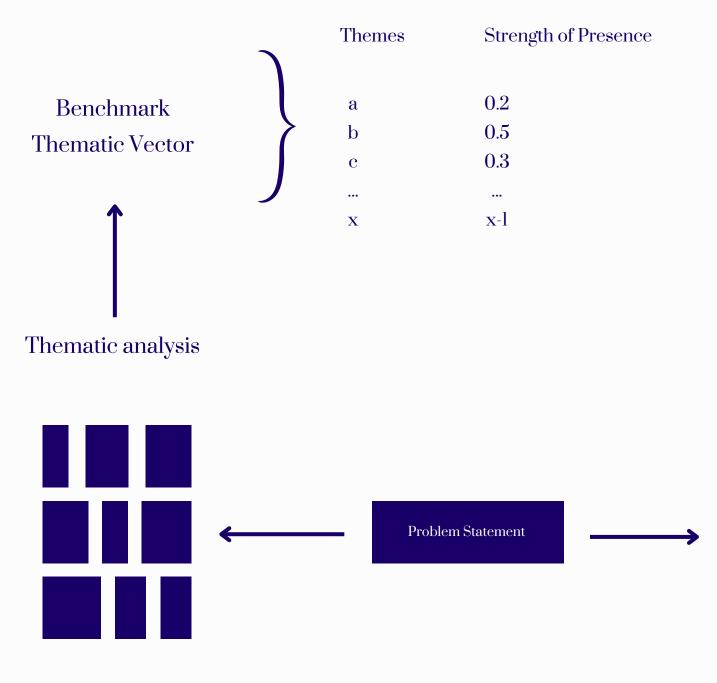




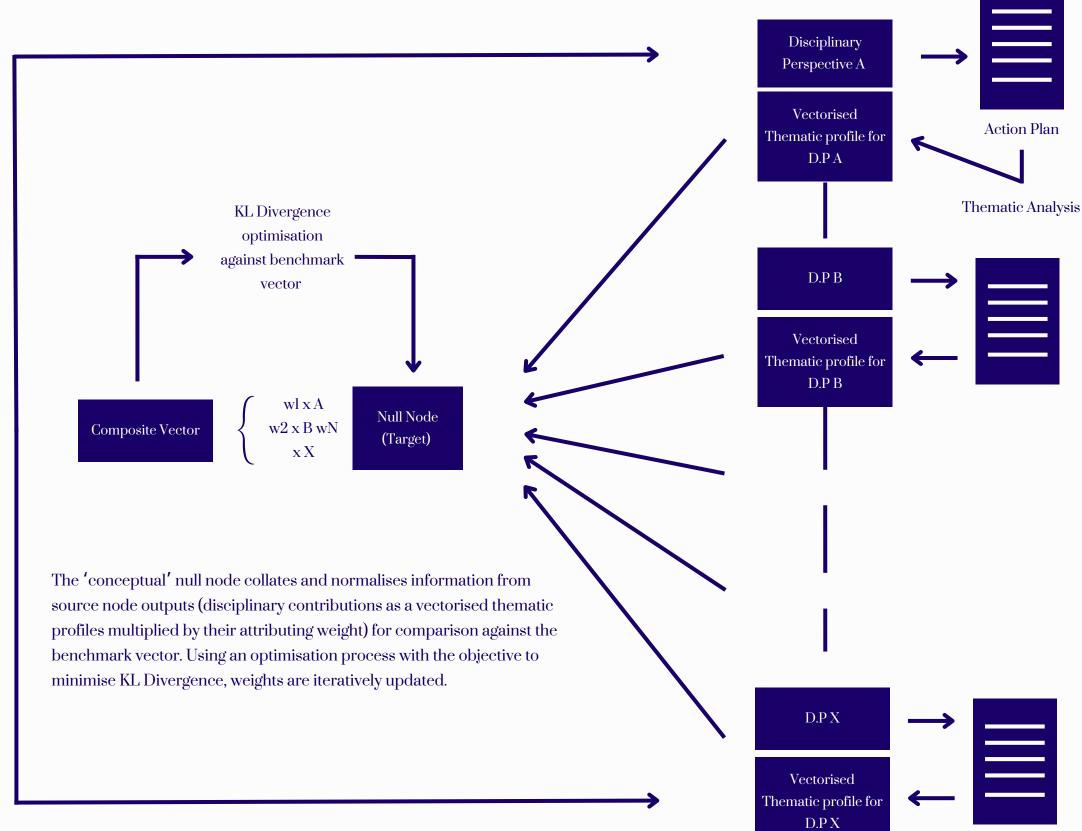




Source Node



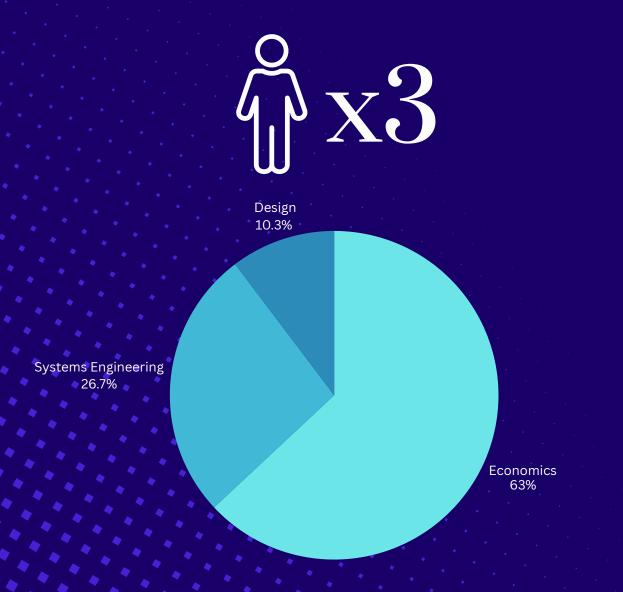
Case study exemplars of
historical, empirically
validated, successful
strategies deployed to tackle
the problem statement



The Proof of Concept: A Pilot Study

Optimal Team Design

For the Achievement of Heathrow Airport's Sustainability Goal's



Economics

Engineering

Environmental Science

Biology

Architecture

Anthropology

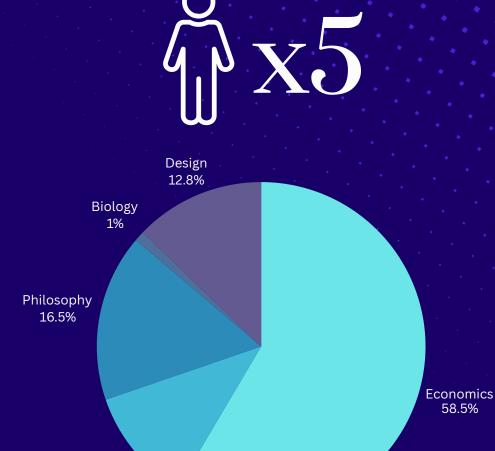
Geography

Systems Engineering

Philosophy

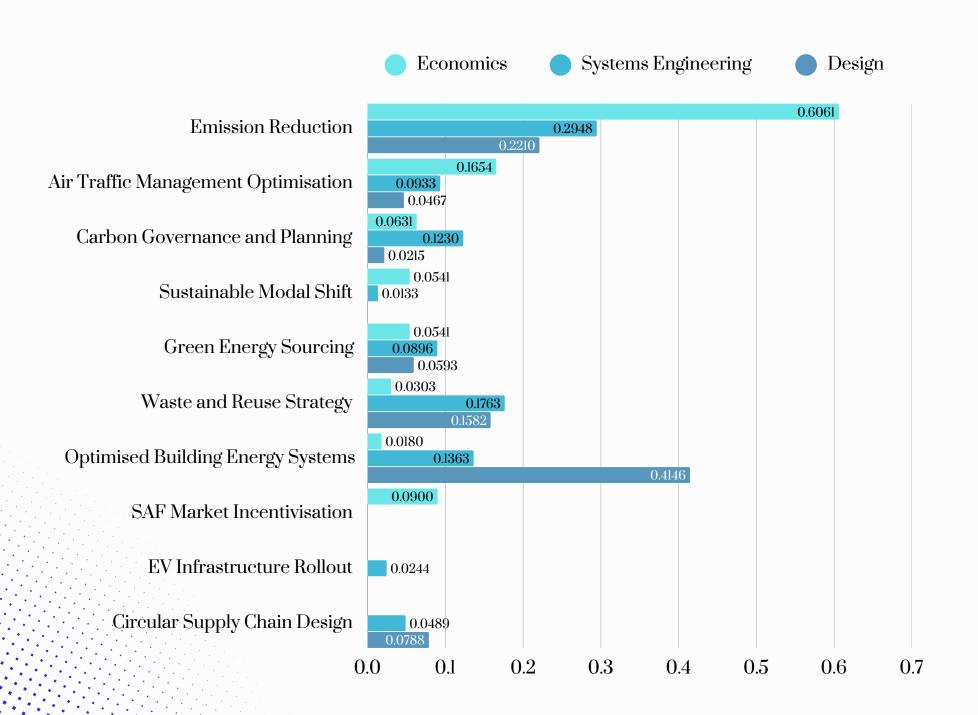
Education

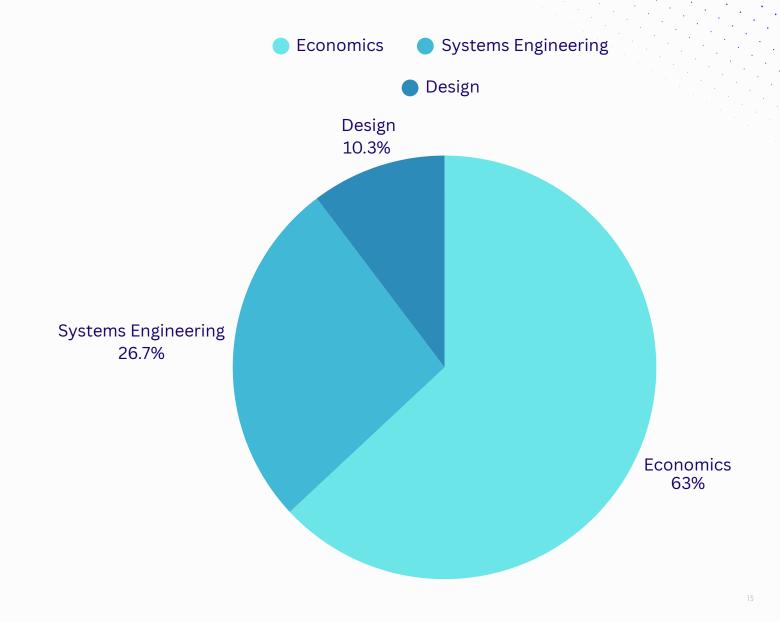
Design



Systems Engineering 11.2%

Disciplinary Make-up





The Proposal: 3-Phase Pilot

NARROWING THE LENS AND SELCETING A PROBLEM

Refine the problem to address a complex problem you face.

MODEL ADAPTION

Adapt the model to your unique workforce and personnel backgrounds and tailor the team size to suit you. Further, develop an improved benchmark for the given problem

STRATEGIC GUIDANCE

I will present you with a datadriven recommendation for team composition along with a detailed report on optimal team structure.

Thank You for Your Attention

THIS PROPOSAL AIMS TO PROVIDE A NOVEL DATA-DRIVEN APPROACH TO OPTIMISING HEATHROW'S STRATEGIC TEAM FORMATION.

We appreciate your consideration and look forward to collaborating on this transformative journey towards a more efficient and innovative future for Heathrow.

